

## SOME PUBLICATIONS OF THE ROYAL SOCIETY

### PROCEEDINGS OF THE ROYAL SOCIETY, SERIES A AND B

Per part (post extra)	£1.	2s. 6d.	(\$ 3.35)
Per volume (cloth bound) (post extra)	£5		(\$15.00)

#### Subscription rates, payable in advance of publication

Per volume in parts as published (post free)	£4		(\$12.00)
Binding cases are available at		5s.	(\$ 0.75)
Per volume cloth bound (post free)	£4.	7s. 6d.	(\$13.15)

A SYMPOSIUM ON CONTINENTAL DRIFT	£8.	10s.	(\$25.00)
----------------------------------	-----	------	-----------

### BIOGRAPHICAL MEMOIRS OF FELLOWS OF THE ROYAL SOCIETY

Volumes 1, 6 and 7 (Volumes 2 to 5 out of print)	£1.	10s. each volume	(\$4.50)
Volumes 8 to 11	£2	each volume	(\$6.00)
Volume 12	£5		(\$15.00)

### NOTES AND RECORDS OF THE ROYAL SOCIETY

Volumes 15 to 22	£1.	10s. each volume	(\$4.50)
------------------	-----	------------------	----------

### YEAR BOOK OF THE ROYAL SOCIETY

1967	£1.	1s.	(\$3.15)
------	-----	-----	----------

### GENERAL NOTES ON THE PREPARATION OF SCIENTIFIC PAPERS

5s. (\$0.75)

### POSTGRADUATE TRAINING IN THE U.K.

I. Chemistry	6s.		(\$1.00)
--------------	-----	--	----------

### GLOSSARY OF CARTOGRAPHIC TERMS

£1 (\$3.00)

### A BRIEF HISTORY OF THE ROYAL SOCIETY

10s. 6d. (\$2.00)

### THE ROYAL SOCIETY: ITS ORIGINS AND FOUNDERS

£1. 15s. (\$6.00)

### SPACE RESEARCH IN THE UNITED KINGDOM

1965-1966	13s.	6d.	(\$2.00)
-----------	------	-----	----------

### MATHEMATICAL TABLES

A leaflet describing these volumes is available from the Executive Secretary, The Royal Society.

# PROCEEDINGS OF THE ROYAL SOCIETY, SERIES A

Number 1466    24 October 1967    Volume 301

---

---

## CONTENTS

NICHOLLS, D. & SZWARC, M.	<i>pages</i> 223–230
Structures of ion-pairs derived from dihydroanthracenes. I. Electronic spectra.	
NICHOLLS, D. & SZWARC, M.	231–238
Structure of ion-pairs derived from dihydroanthracenes. II. Nuclear magnetic resonance studies.	
FRANK, F. C., LAWN, B. R., LANG, A. R. & WILKS, E. M.	239–252
A study of strains in abraded diamond surfaces. [Plates 25 to 27]	
DALGARNO, A. & PARKINSON, E. M.	253–260
An expansion method for calculating atomic properties. X. $1s^2 1S-1sn p^1 P$ transitions of the helium sequence.	
MONTGOMERY, H., PELLIS, G. P. & WRAY, E. M.	261–284
Low temperature specific heats of $\alpha$ phase AgCd and AgPd alloys.	
BRADLEY, J. N. & ROBINSON, P. A.	285–302
Studies in expanded shock tube flows. I. Probe studies of the expansion process.	
BRADLEY, J. N. & ROBINSON, P. A.	303–312
Studies in expanded shock tube flows. II. Interpretation of ion density profiles.	
HAYES, W. & STOTT, J. P.	313–326
Electron nuclear double resonance of the $F$ centre in $\text{CaF}_2$ .	
MARTIN, B. W.	327–341
Free convection in a vertical cylinder with internal heat generation.	
ANKETELL, J. & PERY-THORNE, ANNE	343–353
Oscillator strengths in the $^2\Sigma^+-^2\Pi$ band system of OH by the hook method. [Plate 28]	
ANKETELL, J. & LEARNER, R. C. M.	355–361
Vibration rotation interaction in OH and the transition moment.	

---

---

Price £1. 2s. 6d. (U.S. \$3.35)

*Proc. Roy. Soc. A.* 301

*Published by the Royal Society, 6 Carlton House Terrace, London, S.W. 1*

*Printed in Great Britain  
for the Royal Society at the University Printing House, Cambridge*